

Title (en)
PROCESS FOR THE CONTINUOUS ENZYMATIC CONVERSION OF ALPHA-HYDROXYCARBOXYLIC ACIDS INTO THE CORRESPONDING OPTICALLY ACTIVE ALPHA-AMINO CARBOXYLIC ACIDS

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EP 0121074 A3 19870429 (DE)

Application
EP 84101747 A 19840220

Priority
DE 3307094 A 19830301

Abstract (en)
[origin: ES8500886A1] alpha -Hydroxycarboxylic acids are continuously converted into the corresponding optically active alpha - aminocarboxylic acids. The conversion is carried out in a membrane reactor in the presence of nicotinamide-adenine dinucleotide increased in molecular weight by bonding to a water soluble high molecular weight material, a dehydrogenase specific for the alpha -hydroxycarboxylic acid, a dehydrogenase specific for the corresponding alpha -amino-carboxylic acid and ammonium ions. There is continuously supplied to the membrane reactor an aqueous solution of the alpha -hydroxycarboxylic acid to be reacted, a substantially lesser amount of the corresponding alpha -ketocarboxylic acid, and an amount of ammonium ion at least equivalent to the alpha -hydroxycarboxylic acid to be reacted. There is maintained over the membrane a difference in pressure 1 and 15 bar. Behind the membrane, there is continuously drawn off a filtrate stream containing the alpha -aminocarboxylic acid formed.

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IPC 8 full level
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CPC (source: EP US)
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Citation (search report)
• [A] EP 0023346 A2 19810204 - DEGUSSA [DE], et al
• [T] BIOTECH 84 - EUROPE, 1984, Seiten 391-404; C. WANDREY: "Production of L-amino acids from alpha-hydroxy acids"

Cited by
EP0188712A1; WO9315182A1

Designated contracting state (EPC)
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